915-007.041

PATENT

Proposed Class:

Subclass:

For (title):

NOTE:

"All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand comer of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129." M.P.E.P. § 601, 7th ed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop PATENT APPLICATION Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Jarmo HEINONEN, Markus PETTERSSON and Sami VILHONEN

WARNING: 37 C.F.R.§ 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(l) is filed supplying or changing the name or names of the inventor or inventors."

Provision of Local Oscillator Signals

CERTIFICATION UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date, August 18, 2003, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number ___ EV 252883409 US , addressed to the Commissioner for Patents, Washington, D.C. 20231.

> Annemarie Maher or print name of person mailing paper)

Signature of person mailing paper

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" **WARNING:**

mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(New Application Transmittal [4-1] page 1 of 11)

1. Type of Application This new application is for a(n) (check one applicable item below) ☑ Original (nonprovisional) □ Design □ Plant "Do not use this transmittal for a completion in the U.S. of an International Application under WARNING: 35 U.S.C. § 37(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application. WARNING: Do not use this transmittal for the filing of a provisional application. If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION. Divisional Continuation

2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designated the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or

☐ Continuation-in-part (C-I-P)

- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120,121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 199, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

WARNING:		3 <i>:</i>	When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).					
			The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.					
3.	Pap	ers	Enclosed					
	1.1 <u>20</u> Pa <u>6</u> Pa		uired for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 53 (Design) Application ges of specification ges of claims eets of drawings					
	WAI	RNIN	G: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).					
	NOTE:		"Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm (5/8 inch) down from the top of the page " 37 C.F.R. § 1.84(c)).					
			(complete the following, if applicable)					
			The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. § 1.84(b).					
			The enclosed drawing(s) are in color. Three (3) sets of color drawings and a "PETITION TO ACCEPT COLOR DRAWING(S)" are attached. 37 C.F.R. §§ 1.84(a)(2) and 1.84(b).					
		X D	formal informal					
	В.	Oth	er Papers Enclosed					
	1	_ Pa	ges of declaration and power of attorney ges of abstract her					
4.	Ad	ditic	onal papers enclosed					
			endment to claims					
			ncel in this application claims before calculating filing fee. (At least one original independent claim must be retained for ag purposes.)					
		bee	d the claims shown on the attached amendment. (Claims added have en numbered consecutively following the highest numbered original ims.)					

		Prelimin	ary Amendment			
		Informa	tion Disclosure Statement (37 C.F.R. § 1.98)			
		Form P	TO-1449 (PTO/SB/08A and 08B)			
		Citation	s			
		Declara	tion of Biological Deposit			
		amendn	sion of "Sequence Listing," computer readable copy and/or nent pertaining thereto for biotechnology invention containing de and/or amino acid sequence			
		Authoriz Represe	zation of Attorney(s) to Accept and Follow Instructions from entative			
		Special	Comments			
		Other				
5.	Dec	laration	or oath (including power of attorney)			
NOTE:		A newly executed declaration is not required in a continuation or divisional application provided that the prior nonprovisional application contained a declaration as required, the application being filed is by all or fewer than all the inventors named in the prior application, there is no new matter in the application being filed, and a copy of the executed declaration filed in the prior application (showing the signature or an indication thereon that it was signed) is submitted. The copy must be accompanied by a statement requesting deletion of the names of person(s) who are not inventors of the application being filed. If the declaration in the prior application was filed under § 1.47, then a copy of that declaration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning person under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently executed declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)-(3).				
NOTE:		A declaration filed to complete an application must be executed, identify the specification to which it is directed, identify each inventor by full name including family name and at least one given name, without abbreviation together with any other given name or initial, and the residence, post office address and country or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 C.F.R. § 1.63(a)(1)-(4).				
NOTE:		declaration oath or de application § 1.536	entorship of a nonprovisional application is that inventorship set forth in the oath or on as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an eclaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional on, the inventorship is that inventorship set forth in the application papers filed pursuant (b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) upplying or changing the name or names of the inventor or inventors." 37 C.F.R. §).			
		⊠ End	closed			
		Exe	ecuted by			
			(check all applicable boxes)			
		×	inventor(s).			
			legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43.			
			joint inventor or person showing a proprietary interest on behalf of entor who refused to sign or cannot be reached.			
			This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F. R. § 1.47 is also attached. See item 13 below for fee.			
		□ Not	Enclosed			

NO	TE:	con App may	ere the filing is a completion in the U.S. of an International Application or where the appletion of the U.S. application contains subject matter in addition to the International lication, the application may be treated as a continuation or continuation-in-part, as the case be, be, utilizing ADDED PAGE FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT PRIOR U.S. APPLICATION CLAIMED.				
			☐ Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of <i>all</i> the above named inventor(s).				
(The	dec	laration or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).				
			☐ Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))				
6.	Inv	ente	orship Statement				
WA	RNIN	IG:	If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.				
The	e inv	ento	orship for all the claims in this application is:				
		The	e same.				
			or				
		Not	the same. An explanation, including the ownership of the various claims he time the last claimed invention was made,				
			is submitted.				
			will be submitted				
7.	Laı	ngua	age				
NOTE:		Eng of \$	An application including a signed oath or declaration may be filed in a language other than English. An English translation of the non-English language application and the processing fee of \$130.00 required by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may be set by the Office. 37 C.F.R. § 1.52(d).				
		⊠	English Non English				
			☐ The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).				
8.	Ass	sign	ment				
		X	An assignment of the invention to Nokia Corporation				
			 is attached. A separate ☐ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or ☑ FORM PTO 1595 is also attached. 				
			□ will follow.				
NO	TE:	"If a appl	n assignment is submitted with a new application, send two separate letters-one for the ication and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).				

WARNI	VG:	A newly e. continuation 62-64.	xecuted "CE n-in-part app	RTIFICATE UND	ER 37 an ass.	C.F.R. § 3.73 ignee. Notice	3(b)" must be 1 of April 30, 199	iled when a 93, 1150 OG
	This is a ☐ continuation ☐ divisional application and the assignment does not the parent application 0 / was filed on							
						Reel _	- 10 - 11 - 11 - 11 - 11	
							9	
9. Ce	rtifie	d Copy						
Се	rtifie	d copy(ies	s) of applic	ation(s)				
Co	untry	/		Appli	n. No.			Filed
Co	untry	/		Appli	n. No.			Filed
from w	hich	priority is	claimed:					
		is (are) a will follow						
	or declaration. 37 C.F.R. § 1.55(a) and 1.63.							lates. If any laims benefit en complete
A .	\boxtimes	Regu	ular applica	ation				
				CLAIMS AS	FILE)		
Numbe	er file	d		Number Extra	a	Rate	37 C.F.R. §	asic Fee \$ 1.16(a) 750.00
Total C (37 C.F			11 - 20 =	= 0	×	\$18.00 =		
		nt Claims § 1.16(b))	3 - 3 =	= 0	х	\$84.00 =		
		pendent c C.F.R. § 1			+	\$280.00		
NOTE:		Amendm Fee for e	ent deletir extra claim	ling extra claim ng multiple-dep s is not being p	ender baid at	ncies is enc this time.		canceled by
	ame	endment, pr	ior to the e.	xpiration of the ti ce of fee deficienc	me pei	riod set for re	sponse by the	•
		Filin	g Fee Cald	culation			\$	750.00

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	В.			application 0 – 37 C.F.	R. § 1.16	(f))		
					_	alculation		\$
	C.		Plant ap	plication				
			(\$480.0	0 - 37 C.F.	R. § 1.16(g))		
				Fil	ing Fee C	alculation		\$
11. Sma	III E	ntity	y Stater	nent(s)				
			ent(s) th (are) atta		filing by a	small entity	under /	37 C.F.R. §§ 1.9 and
WARNING		whice pater whice has divised 1.53 entite application the desiration which desiration which will be seen as a seen application the desiration which will be seen as a	h the state of the control of the co	us is available of affect any celly or indirect ablished. The priting of a resmall entity staining benefit a reissue application or opportunity of the proporture of the sayment	e and desire other applied to the perfect of the control of the perfect of the pe	ed. Status as cation or pater in tupon the app f an applicatio ling a continue ation requires a continuing or n U.S.C. § 1190 y rely on a state or in the patem at and status at and status a	a small ent, includionication on under end prosect a new detessue applement file to rincludias a smary filing fe	ch application or patent in entity in one application or ing applications or patents r patent in which the status, § 1.53 as a continuation, sution application under § termination as to continued plication. A nonprovisional 121, or 365(c) of a prior d in the prior application or ication includes a reference des a copy of the statement all entity is still proper and see will be treated as such a
WARNING	€:	state	ement can	unequivoca y 1996 (emph	ily make the asis added)	e required self-	certificatio	or persons signing the on." M.P.E.P., § 509.03, 6 th
			04-4	• •		ollowing, if ap		
			Status			claimed in p		, from which
			benefit	_/_ is being cla	, file aimed for	this applicati	ion unde	er:
				U.S.C. § 🗆 🗆	120, 121, 365(c),			
			and			•	-	pper and desired.
						·		lication is included.
				Filing Fee	Calculation	on (50% of A		
						\$	·	
NOTE:	ar	e file	d within 2	e full fee paid months of th nder § 1.136.	e date of tir	nely payment o	entity stat of a full fee	ement and a refund request e. The two-month period is
12. Rec	lues	st fo	r Intern	ational-Ty	pe Searc	h (37 C.F.R.	§ 1.104	4(d))
				(co	mplete, if	applicable)		
						e search re the merits ta		this application at the

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13.	Fee	Pa	yment Being Made at This Time				
		Not Enclosed					
			No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. § 1.16(e) can subsequently.)	be paid			
	X	End	closed				
		X	Filing fee	\$ <u>750.0</u>	<u>0</u>		
		X	Recording assignment (\$40.00 – 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION.")	\$ <u>40.00</u>	<u>)</u>		
			Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached. (\$130.00 - 37 C.F.R. §§ 1.47 and 1.17(i))	\$	_		
			For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$	-		
			Processing and retention fee (\$130.00, 37 C.F.R. §§ 1.52(d) and 1.21(l))	\$	_		
			Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$	_		
abandoned for failing as the changes to 37 a prior U.S. applicati			C.F.R. § 1.21(I) establishes a fee for processing and retaining any all indoned for failing to complete the application pursuant to 37 C.F.R. § 1.53(f) the changes to 37 C.F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain U.S. application, either the basic filing fee must be paid, or the process of § 1.21(I) must be paid, within 1 year from the notification under § 53(f).) and this, a tain the bei	as well nefit of		
		То	tal fees enclosed	\$	790.00		
14.	. Me	tho	d of Payment of Fees				
			ached is a ⊠ check □ money order in the amount of \$	790.00			
		Au	thorization if hereby made to charge the amount of \$		-		
			to Deposit Account No.				
			to credit card as shown on the attached credit card informauthorization form PTO-2038	rmation			
	□ in		e manner authorized above. A duplicate of this transmittal is				
NO	NOTE: Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 3: C.F.R. § 1.22(b).				aid. 37		

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15. Authorization to Charge Additional Fees

WARNING:		If no fees are to be paid on filling, the following items should <u>not</u> be completed.					
WARNING:		Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.					
☒		The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. 23-0442.					
		 ⊠ 37 C.F.R. § 1.16(a), (f), or (g) (filing fees) ⊠ 37 C.F.R. § 1.16(b), (c), and (d) (presentation of extra claims) 					
NOTE:	pres the 1.16	nuse additional fees for excess or multiple dependent claims not paid on filing or on later centation must only be paid or these claims canceled by amendment prior to the expiration of time period set for response by the P.T.O. in any notice of fee deficiency (37 C.F.R. § (d)), it might be best not to authorize the P.T.O. to charge additional claim fees, except sibly when dealing with amendments after final action.					
		☐ 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)					
		☐ 37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a))					
		□ 37 C.F.R. § 1.17 (application processing fees)					
WARNING:		"A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).					
		☐ 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))					
NOTE:	mail	ere an authorization to charge the issue fee to a deposit account has been filed before the ing of a Notice of Allowance, the issue fee will be automatically charged to the deposit ount at the time of mailing the Notice of Allowance. 37 C.F.R. § 1.311(b).					
to s i be		7 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement in small entity status must be filed in the application prior to paying, or at the time of paying, issue fee." From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.					

16. Instructions as to Overpayment

Customer No. 004955

NOTE:	"Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).						
	X	Credit Account No	23-0442				
		Refund					
			Ct. M.				
Date: A	Aug	ust 18, 2003	SIGNATURE OF PRACTITIONER				
Reg. N	o. ;	31,391	SIGNATORE OF THOST THE				
Tel. No	. (20	93) 261-1234	Francis J. Maguire (type or print name of practitioner				
			Ware, Fressola, Van Der Sluys <u>& Adolphson, LLP</u> P.O. (Correspondence) Address				

Building Five, Bradford Green 755 Main Street, P.O. Box 224 Monroe, CT 06468

	Inc	Incorporation by reference of added pages								
	prio sta the	eck the following item if the application in this transmittal claims the benefit of or U.S. application(s) (including an international application entering the U.S. ge as a continuation, divisional or C-I-P application) and complete and attached ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE NEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.)								
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed								
	_	Number of pages added								
		Plus Added Pages for Papers Referred to in Item 4 Above								
		Number of pages added								
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.								
		Number of pages added								
		Plus "Assignment Cover Letter Accompanying New Application"								
		Number of pages added								
×	Sta	tement Where No Further Pages Added								
		(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item.								
	X	This transmittal ends with this page.								